18%; MDS 17%; NHL 33%. These data show: no significantly difference in the patients outcome between BM or PB SC; auto SCT has a low transplant related morbi-mortality. The higher relapse rate in ALL and ST was in the first year, and AML and Lym in the first 4 years, then the survival curve reaches a plateau, so the remaining patients should be cured. The tandem SCT in MM lets see a significantly better overall survival at 10 years. Lym that relapse after the first auto-SCT can benefit from a second transplant with similar survival that obtained after first auto-SCT, although a bigger number of patient is required to conclude definitely. We think higher ALL overall survival than the literature reports, is in relationship with the maintenance treatment. We emphasize the allo-SCT higher mortality, without relapse after first year except in MDS. Randomized protocols to evaluate maintenance treatment pos SCT and non-mieloablatives allo-SCT are now in development.

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AUTOLOGOUS STEM CELL TRANSPLANTATION IN PATIENTS WITH ACUTE MYELOID LEUKEMIA IS RELATIVELY SAFE AND PROVIDES LONG-TERM DISEASE CONTROL

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Autologous stem cell transplantation (ASCT) in patients with acute myeloid leukemia (AML) is often used as a consolidation therapy after attaining morphologic and cytogenetic remission. ASCT is often the only option when a suitable donor is not available for patients who needed further intensification of treatment. In an attempt to examine whether ASCT provides long-term disease control in patients with AML, we retrospectively evaluated our experience and analyzed the outcomes of ASCT in patients with AML from 1986 to 2005. Twenty-three males and 26 females (n = 49) of median age 44 years (range 15–68 years) were treated. Of these, 42 were in CR at the time of transplantation, and 7 patients were transplanted with active disease. Thirty-three patients were transplanted in first remission. Bone marrow was used in 26 patients as the source of stem cells prior to 1995 and peripheral blood stem cells (PBSC) were used in 20 patients. Three patients received a combination of marrow and PBSC. Forty-eight of 49 patients engrafted (96%). Median time for neutrophil recovery was 17.5 days (range 9–69 days) and 42 days (range 16–303 days) for platelets. Patients who received PBSC achieved granulocyte and platelet engraftments earlier than patients who received bone marrow as the source of stem cells. Median duration of follow-up was 8.5 years (range 29 days–18 years). Of the 49 patients, 32 had died. Five patients (9%) died within 100 days of transplantation. Overall survival (OS) and disease-free survival (DFS) of all evaluable patients were 27% and 33%, respectively. Median duration of response was 11.4 months. No relapses occurred after 2.2 years. OS and DFS in patients transplanted in CR were 32% and 38%, respectively. For those transplanted with disease (n = 7), a complete response was achieved in 4 patients (57%), with a median survival of 166 days. Disease status at transplantation was a significant variable for survival ($P < .01$). Most frequent cause of death was disease relapse (19 out of 32 patients). Two patients developed late onset myelodysplastic syndrome. In conclusion, ASCT in patients with AML in whom an allogeneic transplantation is not feasible appears to be a safe alternative and provides long-term disease control.

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A REVIEW OF THE USE OF TOPOTECAN FOR MOBILIZATION OF PERIPHERAL BLOOD STEM CELLS IN AUTOLOGOUS HEMATOPOIETIC STEM CELL TRANSPLANTATION

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Topotecan is an active agent in many pediatric malignancies. For patients with high risk malignancies for whom consolidation with autologous hematopoietic stem cell transplantation is an option, the use of topotecan for mobilization of hematopoietic progenitor cells is promising. However, there are limited published data on topotecan as a mobilizing agent in pediatric patients with solid tumors. We retrospectively reviewed the medical records of approximately 90 patients undergoing autologous hematopoietic stem cell transplantation from December 2001 to December 2004 at our institution. We identified patients who received topotecan with the purposes of collecting peripheral blood progenitor cells after its administration. These patients had the following diseases: Neuroblastoma, Ewings/PNET, and Wilms tumor. Some patients did have evidence of bone marrow involvement prior to hematopoietic stem cell collection. Topotecan was administered at a dose of 0.75–2 mg/m2/day on days 1–5. GCSF at 10 mcg/kg/day was administered starting 1 day after the completion of chemotherapy. Eight of the 17 patients failed to mobilize peripheral blood progenitor cells. Following a nadir of the absolute neutrophil count, peripheral blood CD34 counts were monitored once the ANC reached 500/cm. Once the absolute peripheral blood CD34 count met or exceeded 20, apheresis was performed. Nine patients underwent apheresis and had an adequate number of peripheral blood CD34 cells collected. The median CD34 collection was 6.495×10^6 CD34+/kg (range 1.806–9.895). All these patients subsequently went on to autologous hematopoietic stem cell transplantation using a variety of conditioning regimens. All patients engrafted post transplant. Patients with early stage disease such as neuroblastoma may have sufficient numbers of peripheral blood cells following topotecan mobilization. This data suggests that topotecan is an active agent for mobilization of peripheral blood cells in newly diagnosed or minimally treated patients.

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HIGH DOSE CHEMOTHERAPY AND AUTOLOGOUS STEM CELL TRANSPLANTATION (ASCT) IN HODGKIN'S DISEASE (HD) WITH ≥2 RELAPSES—TATA MEMORIAL HOSPITAL DATA

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Background: Relapsed or refractory Hodgkin's Disease (HD) patients have a poor prognosis with standard salvage chemotherapy, yielding a cure rate of 20% or less. High dose chemotherapy followed by ASCT is an accepted salvage treatment in relapsed Hodgkin's Disease with improvement in Disease Free and Overall Survival. We present our experience with ASCT in Hodgkin's Disease in patients who had 2 or more relapses. **Patients and Methods:** A total of 19 patients have undergone ASCT for HD over a period of 12 years. There were 15 males and 4 females.The source of stem cells was Peripheral Blood in all the 19 cases. The conditioning regimen used was BEAM in 13 (68%) and ICE in 6 (32%). **Results:** The median age was 28 years. The median number of relapses pre ASCT were 2.3 (range 2–4) and the median time for first relapse after initial chemotherapy was 24 months. The median time from first relapse to ASCT was 29 months.After a median follow-up of 16.5 months, 63% of patients are alive (overall survival) with no evidence of disease in 53% (disease free survival). The Transplant Related Mortality (TRM) is 10%. **Conclusions:** ASCT is an effective salvage treatment in multiply relapsed Hodgkin's Disease with acceptable TRM and good disease free and overall survival.

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PREVENTION OF MUCOSITIS IN AutoBMT/STEM CELL TRANSPLANT PATIENTS

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It is estimated that 80% of patients who undergo high-dose chemotherapy +/− radiotherapy prior to transplantation develop mucositis. Mucositis is a painful complication, which can lead to poor nutrition, increased use of narcotics, dehydration, greater risk for infection and bacteremia, and altered quality of life. Patients can have oral ulceration, epigastric discomfort, diarrhea, rectal irritation, and bleeding. It is likely that the complications of mu-